



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007A1
 UNIQUE ID NUMBER: 6AL005
 COMBUSTOR: Type 1
 ENGINE TYPE: MTF

BYPASS RATIO: 4.8
 PRESSURE RATIO (π_{00}): 18.0
 RATED THRUST (F_{00}) (kN): 34.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	11.4	60.8	45.9	1.2
AS % OF ORIGINAL LIMIT	58.3	51.5	60.4	3.7
AS % OF CAEP/2 LIMIT (NO _x)			75.5	
AS % OF CAEP/4 LIMIT (NO _x)			77.6	
AS % OF CAEP/6 LIMIT (NO _x)			78.7	
AS % OF CAEP/8 LIMIT (NO _x)			84.2	

DATA STATUS

- PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.383	0.22	0.77	19.66	1.0
CLIMB OUT	85	2.2	0.318	0.26	0.96	16.63	0.0
APPROACH	30	4.0	0.113	0.66	3.91	7.10	0.0
IDLE	7	26.0	0.046	3.82	23.73	3.47	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			157	307	1865	1456	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				8.8	53.4	41.7	1.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	16-20

MANUFACTURER: Rolls-Royce Corporation
 TEST ORGANIZATION: Rolls-Royce Corporation
 TEST LOCATION: Indianapolis, Indiana
 TEST DATES: 03/03/1994-19/04/1995

REMARKS

- For effectivity see Rolls-Royce Notice to Operators No. AE3007A-076
- Results are based on Rolls-Royce report EDR 15171B
- AE3007A1 data in this report replace data reported in ICAO databank under ID No. 4AL002, Rev 9

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)